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The Effects of an Off-Season Exercise Program For Special Olympic Athletes

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Abstract

INTRODUCTION: The Special Olympic organization provides seasonal competition for athletes with varying disabilities. Typically, the Special Olympic program focuses primarily on in-season training. In order to increase physical activity throughout the year, we developed off-season training programs for the athletes. The aim of this study was to evaluate the effectiveness of individualized off-season workout programs ultimately improving physical fitness among Special Olympic athletes. METHODS: 11 Special Olympic athletes with intellectual disabilities participated in a structured exercise program study for 6 weeks. Initial testing was performed to assess the capabilities and areas of deficit among the athletes and to individualize the programs. These measures served as the baseline for pre-post intervention comparison. The battery of fitness tests assessed: balance, strength, flexibility, and aerobic abilities. Each participant either met criteria or was below criteria for each test. Participants were separated into peer groups with similar cognitive and physical abilities. The individualized programs targeted their deficits and were administered under the supervision of the investigating team. RESULTS: Pre and Post data was compared with the Cohen's D statistic. This group of athletes showed substantial improvements, for example we documented high effect size for our treatments in strength (partial sit-ups: ES 1.5) and aerobic fitness (3 minute walk test: ES .72). CONCLUSION: Participants improved in their functional performance results. Off-season fitness programs can benefit Special Olympic athletes outside their competition season. With the addition of these training programs, athletes can increase their levels of physical activity and improve performance in their specific events.

Introduction

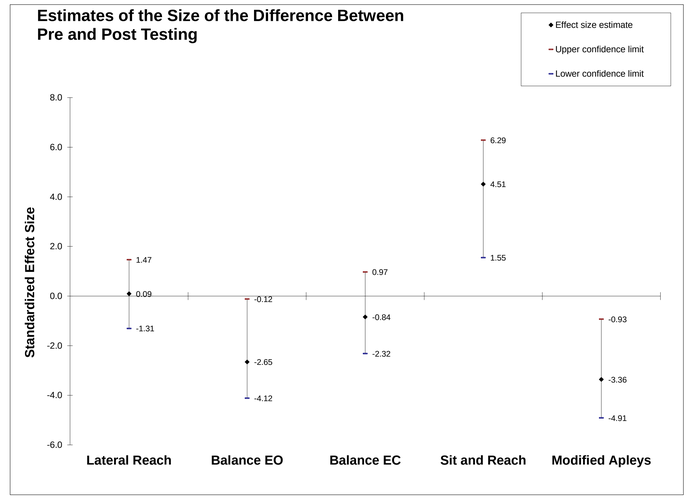
- Previous outlooks on Special Olympic athlete training has been solely focused on pre-competition and competition training.
- There has been a lack of importance placed on post season training.
- During post-season training, athletes have the potential to make significant gains in performance such as Olympic or recreational athletes do.
- **"Get Fit for Sport"** is a year-round fitness program within communities to support this concept of creating off-season training programs.

Purpose

The goal of this study is to establish evidence showing the need and benefits of an off-season training program for those who participate in Special Olympic events.

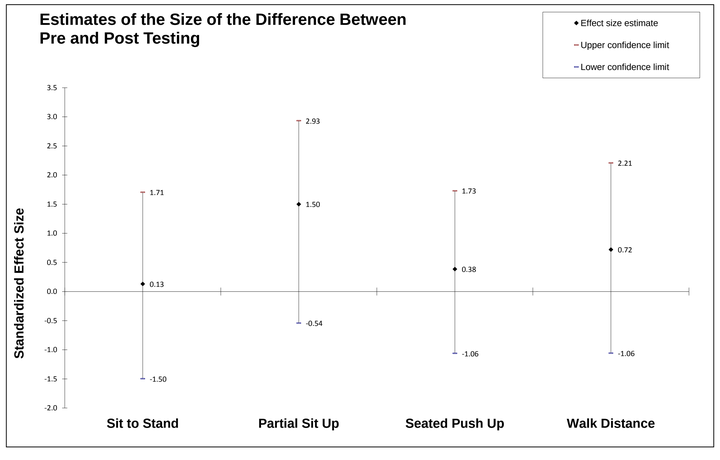
Methods

- Pre-program survey is filled out by each athlete. This survey included some background information, current physical activity, and their goals for this program.
- Battery style of functional fitness tests were preformed in the areas of: Flexibility, Balance, Strength, and aerobic conditioning.
- The results of the battery tests were then used to separate the athletes into smaller work groups based on disabilities, physical capabilities, and potential willingness to work with the other members.
- Individual group training programs were then created by UM students to target weakness within the main areas of functional fitness and to help build or maintain areas related to each athlete's sport or event.
- The fitness interventions continued for 6 weeks with the athletes at the local YMCA in Missoula, MT.
- After 6 weeks of training with the athletes, re-testing was done with the same battery functional fitness tests. These results were then compared to the pre-training results.
- Post-program surveys were then completed by the athletes.



Results

- Substantial improvements were seen in effect size in the areas of strength and aerobic fitness.
- Little to no improvements were seen among the balance and flexibility areas.
- Although there was lack of interest in some areas of exercise, overall the athletes improved in fitness and gained an appreciation for exercise and its health benefits.



Discussion and Conclusions

We can conclude from our training intervention that athletes would benefit from a long-term intervention. This would more likely show significant increases in performance and fitness.

Post-program surveys revealed the athlete's appreciation for exercise and willingness to continue on with a fitness program to help with there sporting events and future health.

From this research, we believe an off-season programs should be implemented among Special Olympic athletic organizations.

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